## AMENDED IN SENATE JUNE 25, 2009 AMENDED IN ASSEMBLY MAY 6, 2009

CALIFORNIA LEGISLATURE—2009-10 REGULAR SESSION

## ASSEMBLY BILL

No. 1106

## **Introduced by Assembly Members Fuentes and Ruskin**

February 27, 2009

An act to add Section 399.21 to amend Section 399.20 of, and to add Section 399.21 to, the Public Utilities Code, relating to energy.

## LEGISLATIVE COUNSEL'S DIGEST

AB 1106, as amended, Fuentes. Renewable electric generation facilities: feed-in tariffs.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations, as defined. The Public Utilities Act imposes various duties and responsibilities on the commission with respect to the purchase of electricity by electrical corporations and requires the commission to review and adopt a procurement plan and a renewable energy procurement plan for each electrical corporation pursuant to the California Renewables Portfolio Standard Program (RPS program). The *RPS* program requires that a retail seller of electricity, including electrical corporations, purchase a specified minimum percentage of electricity generated by eligible renewable energy resources, as defined, in any given year as a specified percentage of total kilowatthours sold to retail end-use customers each calendar year (renewables portfolio standard).

Existing law requires every electrical corporation to file with the commission a standard tariff for electricity generated by an electric

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generation facility, as defined, that is owned and operated by a retail customer of the electrical corporation. Existing law requires that the electric generation facility: (1) have an effective capacity of not more than 1.5 megawatts and be located on property owned or under the control of the customer, (2) be interconnected and operate in parallel with the electric transmission and distribution grid, (3) be strategically located and interconnected to the electric transmission system in a manner that optimizes the deliverability of electricity generated at the facility to load centers, and (4) meet the definition of an eligible renewable energy resource under the RPS program. Existing law requires that the tariff provide for payment for every kilowatthour of electricity generated by an electric generation facility at a market price referent established by the commission pursuant to the program. Existing law requires the electrical corporation to make this tariff available to customers that own and operate an electric generation facility within the service territory of the electrical corporation, upon request, on a first-come-first-served basis, until the combined statewide cumulative rated generating capacity of those electric generation facilities equals 500 megawatts, or the electrical corporation meets its proportionate share of the 500 megawatt limit based upon the ratio of its peak demand to total statewide peak demand of all electrical corporations. Existing law authorizes the commission to modify or adjust the above-described requirements for any electrical corporation with less than 100,000 service connections, as individual circumstances merit. Existing law provides that the electricity generated by an electric generation facility counts toward the electrical corporation's renewables portfolio standard and provides that the physical generating capacity counts toward meeting the electrical corporation's resource adequacy requirements. Existing decisions of the commission refer to this tariff as a feed-in tariff.

This bill would require every electrical corporation to file with the commission a standard feed-in tariff for the electricity generated by a renewable electric generation facility, as defined, that is an eligible renewable energy resource and meets other size, deliverability, and interconnection requirements. The bill would require the commission to consult with the Energy Commission and the Independent System Operator in approving feed-in tariffs and rules for interconnection to the electrical grid. The bill would require the electrical corporation to make the feed-in tariff available to any customer of the electrical corporation, upon request, on a first-come-first-served basis, until the electrical corporation meets its renewables portfolio standard. The bill

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would require the commission to ensure that a customer's eligibility to receive service pursuant to the feed-in tariff is determined in advance so that a customer can invest in a renewable electric generation facility knowing that the customer will be eligible to receive service pursuant to the feed-in tariff and the market price that will be applicable to that customer. The bill would authorize the commission to place time limitations upon a customer for completion of the renewable electric generation facility to remain eligible for the feed-in tariff at the applicable market price and to establish reasonable operation and reliability standards for a renewable electric generation facility to remain eligible for the feed-in tariff at the applicable market price. The bill would provide that the electricity generated by the renewable electric generation facility, including generation used to offset the customer's own usage of electricity, counts toward the electrical corporation's renewables portfolio standard and resource adequacy requirements. The bill would authorize a customer receiving electrical service pursuant to an alternative net metering program, as defined, to elect to receive service pursuant to the feed-in tariff filed by an electrical corporation pursuant to the bill's requirements and would provide that a customer electing to receive service pursuant to the feed-in tariff waives any right the customer otherwise has to thereafter receive service pursuant to an alternative net metering program.

This bill would require the commission, in consultation with the Independent System Operator, to establish tariff provisions that facilitate both the RPS program and the reliable operation of the electrical grid.

This bill would make the existing feed-in tariff statute applicable to an electric generation facility that interconnects to the grid and commences initial operation on or before June 30, 2011. The bill would require an electrical corporation with 100,000 or more service connections to develop, and upon approval by the commission, implement a standard-offer contract and feed-in tariff, as defined, that requires payment for every kilowatthour of electricity delivered to the grid generated by a tariff-eligible generation facility, as defined. The bill would require that an electrical corporation obtain commission approval of the standard-offer contract and feed-in tariff by June 1, 2011, and to implement the contract and tariff by July 1, 2011. The bill would have different requirements for two separate tiers, as specified, of tariff-eligible generation facilities. For a tier one tariff-eligible generation facility with a nameplate capacity of not more than 5 megawatts, the price paid by the electrical corporation for electricity

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delivered to the grid would be based on the reasonable cost of production for specified technologies as determined by the commission, plus a reasonable profit commensurate to that authorized by the commission for the electrical corporation. For a tier 2 tariff-eligible generation facility with a nameplate capacity of more than 5 megawatts and not more than 10 megawatts, the price to be paid by the electrical corporation for electricity delivered to the grid would be the total benefit of the electricity to ratepayers as determined by the commission. The bill would require the commission to establish the price to reflect the value of every kilowatthour of electricity generated on a time-of-delivery basis and any other attributes of renewable generation. The bill would require an electrical corporation to make the standard-offer contract and feed-in tariff available to the owner or operator of a tariff-eligible generation facility upon request. The bill would require the commission to establish performance standards for tier 2 tariff-eligible generation facilities to ensure that the facilities are constructed, operated, and maintained to generate the expected annual net production of electricity and do not impact system reliability. The bill would authorize the commission to modify these requirements for an electrical corporation with less than 100,000 service connections in the state based upon the individual circumstances of that electrical corporation. The bill would provide that the electricity generated by a tariff-eligible generation facility counts toward the electrical corporation's renewables portfolio standard and that the purchase of electricity includes the purchase of all renewable and environmental attributes associated with the production of electricity by the tariff-eligible generation facility.

Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime. Because this bill would require an order or other action of the commission to implement its provisions and a violation of that order or action would be a crime, the bill would impose a state-mandated local program by creating a new crime.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

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The people of the State of California do enact as follows:

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SECTION 1. Section 399.20 of the Public Utilities Code is amended to read:

- 399.20. (a) It is the policy of this state and the intent of the Legislature to encourage energy production from renewable energy resources.
- (b) As used in this section, "electric generation facility" means an electric generation facility, owned and operated by a retail customer of an electrical corporation, and that meets all of the following criteria:
- (1) Has an effective capacity of not more than one and one-half megawatts and is located on property owned or under the control of the customer.
- (2) Is interconnected and operates in parallel with the electric transmission and distribution grid.
- (3) Is strategically located and interconnected to the electric transmission system in a manner that optimizes the deliverability of electricity generated at the facility to load centers.
- (4) Is an eligible renewable energy resource, as defined in Section 399.12.
- (c) Every electrical corporation shall file with the commission a standard tariff for electricity generated by an electric generation facility.
- (d) The tariff shall provide for payment for every kilowatthour of electricity generated by an electric generation facility at the market price as determined by the commission pursuant to Section 399.15 for a period of 10, 15, or 20 years, as authorized by the commission.
- (e) Every electrical corporation shall make this tariff available to customers that own and operate an electric generation facility within the service territory of the electrical corporation, upon request, on a first-come-first-served basis, until the combined statewide cumulative rated generating capacity of those electric generation facilities equals 500 megawatts. An electrical corporation may make the terms of the tariff available to customers in the form of a standard contract subject to commission approval. Each electrical corporation shall only be required to offer service or contracts under this section until that electrical corporation meets its proportionate share of the 500 megawatts based on the

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1 ratio of its peak demand to the total statewide peak demand of all
2 electrical corporations.

- (f) Every kilowatthour of electricity generated by the electric generation facility shall count toward the electrical corporation's renewables portfolio standard annual procurement targets for purposes of paragraph (1) of subdivision (b) of Section 399.15.
- (g) The physical generating capacity of an electric generation facility shall count toward the electrical corporation's resource adequacy requirement for purposes of Section 380.
- (h) The commission may modify or adjust the requirements of this section for any electrical corporation with less than 100,000 service connections, as individual circumstances merit.
- (i) The commission shall only enforce the requirements of this section with respect to an electric generation facility that interconnects to the grid and commences initial operation on or before June 30, 2011, and shall continue to enforce the requirements of this section until the 10-,15-, or 20-year term of the tariff is completed. Upon completion of the 10-,15-, or 20-year term of the tariff pursuant to this section, an electric generation facility that is a tariff-eligible generation facility pursuant to Section 399.21, may receive service pursuant to that section. The commission shall enforce the requirements of Section 399.21 with respect to an electric generation facility that is a tariff-eligible generation facility that interconnects to the grid or commences initial operation on or after July 1, 2011.
- SEC. 2. Section 399.21 is added to the Public Utilities Code, to read:
- 399.21. (a) For purposes of this section, the following terms have the following meanings:
- (1) "Alternative net metering program" means any program that requires an electrical corporation to purchase or credit electricity generated by a subscriber pursuant to Article 3 (commencing with Section 2821) of Chapter 7 of Part 2.
- (2) "Feed-in tariff" means a schedule detailing the rates, rules, and terms of service that is filed by an electrical corporation and approved by the commission that governs the electrical corporation's purchase of electricity delivered to the grid that is generated by a tariff-eligible generation facility.
- (3) "Tariff-eligible generation facility" means a facility for the generation of electricity that meets all of the following criteria:

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(A) Has a nameplate capacity that falls within either of the following two tiers:

- (i) Tier one has a nameplate capacity of not more than 5 megawatts.
- (ii) Tier two has a nameplate capacity of more than 5 megawatts and not more than 10 megawatts.
  - (B) Is an eligible renewable energy resource.

- (C) Is interconnected to the electrical corporation's transmission or distribution grid and meets the requirements for parallel operation established by the commission for distributed generation. This subparagraph does not limit the ability of a tariff-eligible generation facility to interconnect to the transmission grid pursuant to the Small Generator Interconnection Protocol of the Independent System Operator and approved by the Federal Energy Regulatory Commission.
- (D) Is located within the service territory of the electrical corporation.
- (b) On or before July 1, 2011, the commission shall implement the requirements of this section for each electrical corporation with 100,000 or more service connections in the state. The commission may modify the requirements of this section for an electrical corporation with less than 100,000 service connections in the state based upon the individual circumstances of that electrical corporation.
- (c) (1) An electrical corporation shall develop and, upon approval by the commission, implement a standard-offer contract and a feed-in tariff that requires payment for every kilowatthour of electricity generated and delivered to the grid by a tier one or tier two tariff-eligible generation facility pursuant to the requirements of this section.
- (2) The commission shall approve the standard-offer contract and feed-in tariff at rates and upon those terms that the commission determines are reasonable, subject to the requirements of subdivision (d) for a tier one tariff-eligible generation facility and subdivision (e) for a tier two tariff-eligible generation facility.
- (3) An electrical corporation shall obtain commission approval of a standard-offer contract and feed-in tariff by June 1, 2011, and the standard-offer contract and feed-in tariff shall be implemented by July 1, 2011.

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1 (d) (1) For tier one tariff-eligible generation facilities, separate 2 tariff prices shall be established for each of the following 3 technologies:

- 4 (A) Thin-film solar photovoltaic.
- 5 (B) Solar photovoltaic technologies other than thin-film solar 6 photovoltaics.
- 7 (C) Solar thermal electric.
- 8 (D) Wind.

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- (E) Biogas, digester gas, and landfill gas.
- 10 (F) Biomass and municipal solid waste conversion.
- 11 (G) Geothermal.
- 12 (H) Small hydroelectric.
  - (I) Any additional technology that the commission determines is an eligible renewable energy resource and that holds promise to contribute toward meeting the renewables portfolio standard procurement requirements.
  - (2) The feed-in tariff and standard-offer contract for a tier one tariff-eligible generation facility shall include both of the following:
  - (A) A price to be paid by the electrical corporation for electricity delivered to the grid for each technology specified in paragraph (3) of subdivision (c), that is based on the reasonable cost of production for that technology, as determined by the commission, plus a reasonable profit commensurate to that authorized by the commission as a reasonable rate of return for the electrical corporation. On or before January 1, 2011, and by January 1 of each odd-numbered year thereafter, the commission shall separately determine the reasonable cost to generate electricity from a tier one tariff-eligible generation facility for each technology specified in paragraph (1). In determining the reasonable cost of production for each technology, the commission shall consider the availability of federal and state credits or incentives. The maximum price paid by an electrical corporation pursuant to this paragraph shall not exceed thirty dollars (\$30) per kilowatthour or \_\_\_\_ percent above the average cost of electricity generated by eligible renewable energy resources, whichever is lower.
- 37 (B) A contract term and fixed purchase price of a duration of 38 not less than 25 years. The purchase price shall not, during the 39 term of the contract, be subject to adjustment pursuant to 40 paragraph (3).

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(3) The price to be paid by the electrical corporation for electricity delivered to the grid pursuant to the standard-offer contract and feed-in tariff shall be reviewed and, if needed, prospectively adjusted downward on a biennial basis to reflect changing costs of production as determined by the commission. The adjusted purchase price is applicable to a tier one tariff-eligible generation facility that interconnects to the grid or commences initial operation subsequent to the operative date of the revised feed-in tariff.

- (4) An electrical corporation shall make the standard-offer contract and feed-in tariff available to the owner or operator of a tier one tariff-eligible generation facility upon request.
- (5) The owner or operator of a tier one tariff-eligible generation facility may elect to instead receive service pursuant to an alternative net metering program.
- (e) (1) The feed-in tariff and standard-offer contract for a tier two tariff-eligible generation facility shall include both of the following:
- (A) A price to be paid by the electrical corporation for electricity delivered to the grid that is the total benefit of the electricity to ratepayers. The commission shall establish the price to reflect the value of every kilowatthour of electricity generated on a time-of-delivery basis and any other attributes of renewable generation.
- (B) A contract term and fixed purchase price for a period of 10, 15, and 20 years, at the option of the owner or developer of the tier two tariff-eligible generation facility. The purchase price shall not, during the term of the contract, be subject to adjustment pursuant to paragraph (2).
- (2) The price to be paid by the electrical corporation for electricity delivered to the grid pursuant to the standard-offer contract and feed-in tariff shall be reviewed and, if needed, prospectively adjusted downward on a biennial basis. The adjusted purchase price is applicable to a tier two tariff-eligible generation facility that interconnects to the grid or commences initial operation subsequent to the operative date of the revised feed-in tariff.
- (3) An electrical corporation shall make the standard-offer contract and feed-in tariff available to the owner or operator of a tier two tariff-eligible generation facility upon request.

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(4) An owner or operator of a tier two tariff-eligible generation facility that elects to receive electrical service pursuant to the feed-in tariff or standard-offer contract filed by an electrical corporation waives any right that they may have as a customer of the electrical corporation to thereafter receive service pursuant to an alternative net metering program.

- (5) The commission shall establish performance standards for tier two tariff-eligible generation facilities to ensure that the facilities are constructed, operated, and maintained to generate the expected annual net production of electricity and do not impact system reliability.
- (f) Every kilowatthour of electricity generated by a tariff-eligible generation facility purchased by the electrical corporation pursuant to this section shall count toward the electrical corporation's renewables portfolio standard annual procurement targets for purposes of paragraph (1) of subdivision (b) of Section 399.15. The purchase of electricity by an electrical corporation pursuant to this section includes the purchase of all renewable and environmental attributes associated with the production of electricity by the tariff-eligible generation facility.
- (g) Every kilowatthour of electricity generated by a tariff-eligible generation facility purchased by the electrical corporation pursuant to this section shall count toward any renewable energy procurement requirement imposed pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code).
- (h) Expenses incurred by an electrical corporation for purchases of electricity under a commission approved standard-offer contract or feed-in tariff shall be fully recoverable by the electrical corporation in rates.
- (i) This section does not limit the authority of an electrical corporation to enter into bilateral contracts for the purchase of electricity to meet its renewables portfolio standard procurement requirements pursuant to this chapter or its resource adequacy requirements pursuant to Section 454.5.
- (j) The commission shall, in consultation with the Energy Commission, monitor the ongoing impacts of the feed-in tariff and standard-offer contract on grid reliability and reducing transmission congestion costs. The commission may reduce the upper capacity limitation of any tier if the commission finds that

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a reduced capacity limitation is necessary to maintain system reliability within that electrical corporation's service territory.

SECTION 1. Section 399.21 is added to the Public Utilities Code, to read:

- 399.21. (a) It is the policy of this state and the intent of the Legislature to encourage energy production from renewable resources in an amount commensurate with electricity demand.
- (b) As used in this section the following terms have the following meanings:
- (1) "Alternative net metering program" means any program that requires an electrical corporation to purchase or credit electricity generated by a subscriber pursuant to Article 3 (commencing with Section 2821) of Chapter 7 of Part 2.
- (2) "Renewable electric generation facility" means a facility for the generation of electricity that is owned and operated by a customer of an electrical corporation and that meets all of the following criteria:
- (A) Has an effective generating capacity of not more than 20 megawatts and is located on property owned or under the control of the customer.
- (B) Is interconnected and operates in parallel with the electric transmission and distribution grid.
- (C) Is strategically located and interconnected to the electric transmission system in a manner that optimizes the deliverability of electricity generated at the facility to load centers.
- (D) Is an eligible renewable energy resource pursuant to this article.
- (c) Every electrical corporation shall file with the commission a standard feed-in tariff for the electricity generated by a renewable electric generation facility. The commission shall consult with the Energy Commission and the Independent System Operator in approving feed-in tariffs and rules for interconnection.
- (d) The feed-in tariff shall provide for payment for every kilowatthour of electricity generated at a renewable electric generation facility at the market price as determined by the commission pursuant to Section 399.15 for a period of 10, 15, or 20 years, as authorized by the commission.
- (e) Every electrical corporation shall make the feed-in tariff available to customers that own and operate a renewable electric generation facility within the service territory of the electrical

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corporation, upon request, on a first-come-first-served basis, until the electrical corporation meets its renewables portfolio standard. An electrical corporation may make the terms of the feed-in tariff available to customers in the form of a standard contract subject to commission approval. An electrical corporation shall only be required to offer service or contracts under this section until that electrical corporation meets its renewables portfolio standard, as determined by the commission.

- (f) The commission shall ensure that a customer's eligibility to receive service pursuant to the feed-in tariff is determined in advance so that a customer can invest in a renewable electric generation facility knowing that the customer will be eligible to receive service pursuant to the feed-in tariff and the market price that will be applicable to that customer. The commission may place time limitations upon a customer for completion of the renewable electric generation facility to remain eligible for the feed-in tariff at the applicable market price. The commission may establish reasonable operation and reliability standards for a renewable electric generation facility to remain eligible for the feed-in tariff at the applicable market price.
- (g) Every kilowatthour of the electricity generated by the renewable electric generation facility, including generation used to offset the customer's own usage of electricity, shall count toward the electrical corporation's renewables portfolio standard annual procurement targets for purposes of paragraph (1) of subdivision (b) of Section 399.15.
- (h) The physical generating capacity of a renewable electric generation facility shall count toward the electrical corporation's resource adequacy requirement for purposes of Section 380.
- (i) (1) A customer receiving electrical service pursuant to an alternative net metering program may elect to receive service pursuant to the feed-in tariff filed by an electrical corporation pursuant to this section.
- (2) A customer that elects to receive electrical service pursuant to the feed-in tariff filed by an electrical corporation pursuant to this section waives any right that the customer otherwise has to thereafter receive service pursuant to an alternative net metering program.

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(j) The commission shall, in consultation with the Independent System Operator, establish tariff provisions that facilitate both the provisions of this section and the reliable operation of the grid. SEC. 2.

SEC. 2.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIIIB of the California

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